

ceous sort of structure ; and the form altogether presents very much the appearance of a bug. Ventral sucker round and rather deep.

Length about 3 lines, breadth about $2\frac{1}{2}$ lines.

Hab. — ? Old collection.

5. Descriptions of new Australian Snakes. By GERARD KREFFT, F.L.S., C.M.Z.S., Curator and Secretary of the Australian Museum at Sydney, N.S.W.

CACOPHIS FORDEI. (Figs. 1 & 2.)

Scales in 15 rows. Abdominal plates — ? Subcaudals — ? Two anal plates.

Total length 13 inches, head $\frac{1}{2}$, tail $1\frac{3}{4}$.

Figs. 1 & 2.



Cacophis fordei.

Body elongate and rounded ; head rather small, not distinct from trunk, flat, regularly shielded ; vertical moderate, with a very sharp angle behind ; superciliaries much smaller, occipitals slightly larger than the vertical ; rostral rather depressed, with a groove on its lower edge ; one anterior, two posterior oculars ; one large and elongate temporal shield, with two others behind, the upper one being nearly as large as the first temporal ; six upper labials, the third and fourth coming into the orbit ; these shields increase from the first to the last, which is the largest ; the lower labials are also six in number ; the eye is small, with rounded pupil ; scales hexagonal, about as broad as they are long, except the upper rows on the back, which are more elongate. The head is scarcely to be distinguished from the body, and for one-fourth of the whole length there is no increase in size ; the body then gradually enlarges, being much stouter posteriorly, with a short and very distinct tail. In young and half-grown individuals these characters are not so clearly defined ; the tail is nearly of the same size as in the adult, rather stout, but distinct from the body. The general colour is a kind of sepia-brown above, in adults much lighter anteriorly, a white or yellowish collar

dividing the head from the neck. This collar commences at the last labial shield, covers five scales in length by one (or at the angle two scales) wide; it then crosses the neck, the width of a scale or less, and joins the opposite angle. The shields on the side of the face are all more or less spotted with white, including the outer edges of the superciliaries, the rostral, and the first pair of frontals. The general colour of the body covers the outer margin of every abdominal plate, rather jagged and irregular in the middle, but sharply defined on the sides, particularly in young individuals; the inner margins of the two-rowed subcaudals are marked in the same way to the tip. The abdominal plates are otherwise of a clear straw-yellow, brighter in young individuals. The outer margin of each scale of the back is darkly shaded, with a light elongate spot in the middle, giving the body a keeled appearance.

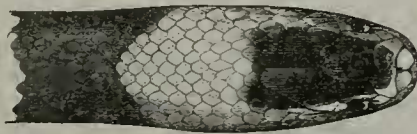
Hab. Mr. George Masters discovered this handsome little Snake at the Pine-Mountain, near Ipswich, Queensland, and states that it can be freely handled without offering to bite.

CACOPHIS HARRIETTÆ. (Fig. 3.)

Scales in 15 rows. Abdominal plates 193. Two anal plates. Subcaudals 35/35, or more.

Total length 12 inches, head $\frac{1}{2}$, tail $1\frac{1}{2}$.

Fig. 3.



Cacophis harriettæ.

Body rather elongate and rounded; head scarcely distinct from trunk, quadrangular, not much depressed; tail rather short and stout, distinct from the body. The vertical is rounded off behind, about as large again as the superciliaries; the occipitals are rather small and narrow, not much larger than the vertical (too large in my figure). The plates on the side of the face are similar to those of *C. fordei*; the third and fourth upper labials come under the eye, and the sixth and last is the largest; the temporal shields are one large one and two others of unequal size behind. The general colour is a kind of purplish brown above, each scale with a white central streak (except the outer row on each side), forming thirteen thin lines from nape to base of tail; head and neck white above, with a central spot (the colour of the body) covering part of posterior frontals, vertical superciliaries, and occipitals, and one row of scales surrounding the occipitals. The shields on the side of the face, the lower labials, and chin-shields are dark-spotted and blotched; eye small, pupil rounded. Abdominal plates uniform purplish brown, with a light outer edge; subcaudals with similar markings.

Hab. Warro, Port Curtis, Queensland. Discovered by F. A. Blackman, Esq.

CACOPHIS BLACKMANII. (Fig. 4.)

Scales in 15 rows. Abdominal plates 197. Two anal plates. Subcaudals 43/43, or more.

Total length 16 inches, head $\frac{5}{8}$, tail $2\frac{1}{4}$.

Fig. 4.



Cacophis blackmanii.

Body elongate and rounded; head distinct from neck, rather depressed, with obtuse muzzle. The vertical without the sharp angle behind would form a square; the superciliaries are very small, slightly larger than the anterior ocular; occipitals also of small size, and not as large again as the vertical; the hind part of the head rather thick; the vertical and occipitals depressed. Six upper labials, the two last of about equal size, with a large temporal shield wedged in between them; seven lower labials. Purplish brown above, lighter on the sides; all scales with a slightly transparent outer edge, but without any markings; ventrals straw-yellow, with darker spots in the corners. Head, from the muzzle to the occipitals, dark brown above; the upper margin of the upper labials tinted with the same colour, the rest of the lower labials yellowish; mental shield dark brown. The upper part of the head behind the occipitals light brown; a clear small spot in the corner of each superciliary yellow.

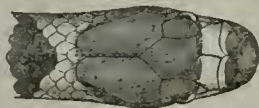
Hab. The Pine-Mountain, Queensland. Discovered by Mr. George Masters.

VERMICELLA LUNULATA. (Figs. 5 & 6.)

Scales in 15 rows. Abdominal plates 220, or more. Two anal plates. Subcaudals 26/26, or more.

Total length $8\frac{1}{2}$ inches, head less than $\frac{1}{4}$, tail $\frac{1}{2}$.

Figs. 5 & 6.



Vermicella lunulata.

Head very flat; rostral not quite so high as in *V. annulata*; vertical and occipitals more elongate. Head, body, and tail covered by fifty-nine elliptical spots, which, only in a few instances near the tail, join beneath, but very faint and scarcely a line in width. On the middle of the back these spots are about $\frac{1}{8}$ inch wide.

Hab. The Upper Burdekin. A single specimen in the Museum collection.

DENISONIA, Krefft.

Head high and quadrangular, distinct from trunk, regularly shielded, but with a large loreal, which is absent in all other Australian venomous Snakes. Body not very elongate.

DENISONIA ORNATA. (Fig. 7.)

The present species is a very peculiar form on account of the loreal shield, which in the venomous Colubrine Snakes is, I believe, generally absent. The head is rather thick, distinct from trunk, high, and quadrangular, with shelving snout; and in this respect resembles the genus *Acanthophis*. The markings of the upper and lower labials, the chin-shields, and the first ten or fifteen abdominal plates are almost identical with those of young Death-adders of the first year. The occiput is black from the posterior frontals to the commencement of the neck, leaving a mottled spot on the inner margin of the superciliaries, and another very small one at the posterior part of the vertical. The tips of the two occipitals and the scale between them are also light-coloured; and below these is another whitish spot formed by the inner portions of eight scales with a darker centre. The occipitals are slightly raised above the eye, and resemble in this respect the same scales in *Acanthophis*. The frontals are shelving downwards; and the rostral is very low, and not visible from above if the head is put in a horizontal position. Body and tail above lead-coloured, beneath whitish; the abdominals with brown spots in the corner of each plate, which become faint towards the tail.

Fig. 7.



Denisonia ornata.

Hab. Mr. Thomas Nobbs, a liberal donor to the Museum, discovered this new Snake near Rockhampton, in Queensland.

EMYDOCEPHALUS, Krefft.

Anterior half of the trunk rounded, posterior part compressed; ventral plates well developed. Head shielded, gape of mouth short;

three upper and three lower labials, the middle one largest, covering nearly the whole upper and lower lip (scales large and much imbricated, in sixteen rows). Occipitals not much larger than the superciliaries, very irregular, with sometimes a plate between them, and much broader than long. Tail much compressed, ending in a large flat scale, with two or three denticulations and a strong keel on each side. Scales in sixteen or seventeen rows, hexagonal, much imbricated, and covered with from five to ten or more tubercles. Ventral plates much tuberculated, in particular those near the tail.

EMYDOCEPHALUS ANNULATUS.

Scales in 16 or 17 rows. Ventral plates 144. One anal plate. Subcaudals 36 (ending in a broad spine).

Total length 30 inches.

Scales large and imbricated. Head small, about as long as broad, covered with rounded plates, which are more or less raised in the middle and much tuberculated; one or two elongate shields wedged in between the superciliaries; the number of upper and lower labials reduced to three, a middle one of extraordinary size between two small scale-like shields, each scale and plate covered with many small tubercles, and the body encircled by thirty-five black and as many white rings. The white scales upon the back and sides more or less black, and some of the black rings white-spotted.

Hab. Probably the Australian seas. Two specimens in the Museum collection.

EMYDOCEPHALUS TUBERCULATUS.

Scales in 17 rows. Abdominal plates 135. One anal plate. Subcaudal plates 30.

Total length 32 inches, head 1, tail $5\frac{1}{2}$, girth 4.

Head short, but longer than in the previous species; neck rounded; all the other parts of the body compressed, very stout, with strongly compressed tail, ending in a large flat scale or spine divided into three segments. Scales very large, hexagonal, the greater portion fully one quarter of an inch wide, much imbricated and tuberculated. Abdominal plates large, with a fold or ridge in the middle, but not keeled; each plate covered with several elongated tubercles. Head shielded, the sutures of the frontals and nasals forming right angles; vertical nearly rounded; superciliaries large, five-sided; occipitals short, much broader than long. Three upper and lower labials, the middle one very large, covering nearly the whole gape; the middle lower labial shield very irregular in form, with one or two indentations. One anterior and two posterior oculars; eye of moderate size. General colour uniform purplish brown; some of the scales on the side mottled with lighter brown spots.

Hab. Probably the Australian seas. A single specimen in the Museum collection.